

BID FORM

## MISSOURI DEPARTMENT OF TRANSPORTATION

## GENERAL SERVICES

830 MoDOT DRIVE – P.O. BOX 270

JEFFERSON CITY, MO 65109

REQUEST NO. 2-090603BT2

DATE May 19, 2009

PAGE NO. 1 NO. OF PAGES

SEALED BIDS, SUBJECT TO THE ATTACHED CONDITIONS WILL  
BE RECEIVED AT THIS OFFICE UNTIL**2:00 p.m., Local Time, June 3, 2009**AND THEN PUBLICLY OPENED AND READ FOR FURNISHING  
THE FOLLOWING SUPPLIES OR SERVICES.**BIDS TO BE BASED F.O.B. MISSOURI DEPARTMENT OF  
TRANSPORTATION**

Submit net bid as cash discount stipulations will not be considered

Various MoDOT Locations

DEFINITE DELIVERY DATE SHOULD BE SHOWN. THE BIDDER MUST SIGN AND RETURN BEFORE DATE AND TIME SET  
FOR OPENING. **ALL BIDS SHOULD BE EXTENDED AND TOTALED.**

BUYER: Brenda Tyree

BUYER TELEPHONE: 573-751-7482

BUYER EMAIL:

Brenda.Tyree@modot.mo.gov

## SUPPLIES OR SERVICES

**LIQUID CALCIUM CHLORIDE**To establish a contract to furnish "**Liquid Calcium Chloride**" with an effective date of  
Notice to Proceed and ending May 31, 2010 in accordance with the following pages.

**Components of Agreement:** The Agreement between MHTC and the successful Bidder shall consist of: the RFB and any written amendments thereto, the "Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions" that are attached to this RFB, the bid submitted by the Bidder in response to the RFB and the post-award contract agreement signed between the parties. However, MHTC reserves the right to clarify any relationship in writing and such written clarification shall govern in case of conflict with the applicable requirements stated in the RFB or the Bidder's bid. The Bidder is cautioned that its bid shall be subject to acceptance by MHTC without further clarification.

**Return sealed bid to the address shown at the top of this page.**

(SEE ATTACHED FOR CONDITIONS AND INSTRUCTIONS)

*In compliance with the above Request For Bid, and subject to all conditions thereof, the undersigned bidder agrees to furnish and deliver any or all the items on which prices were bid within the timeframe specified herein, after receipt of formal purchase order.*

Date: \_\_\_\_\_

Firm Name: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Address: \_\_\_\_\_

Fax No.: \_\_\_\_\_

Federal I.D. No. \_\_\_\_\_

By (Signature): \_\_\_\_\_

Email Address: \_\_\_\_\_

Type/Print Name \_\_\_\_\_

Is your firm MBE  
certified?☐

Yes

☐

No

Title:

Is your firm WBE  
certified?☐

Yes

☐

No

## **1. INTRODUCTION AND GENERAL INFORMATION**

### **1.1 Introduction:**

- 1.1.1 This Request For Bid seeks bids from qualified organizations to provide Calcium Chloride (Liquid) to various locations within the State of Missouri with an effective contract period of Notice to Proceed through May 31, 2010, to the Missouri Highways and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT). Each bid must be mailed in a sealed envelope to Ms. Brenda Tyree, General Services Procurement Unit, 830 MoDOT Drive, P.O. Box 270, Jefferson City, Mo 65109, or hand-delivered in a sealed envelope to the General Services Procurement Office in the Highway and Transportation Building at 830 MoDOT Drive, Jefferson City, Missouri. All questions regarding the RFB shall be submitted to Ms. Brenda Tyree. Bids must be returned to the office of Ms. Brenda Tyree no later than 2:00 p.m., CDT, June 3, 2009.

#### **RFB Coordinator:**

**Ms. Brenda Tyree, Procurement Agent  
Missouri Department of Transportation  
830 MoDOT Drive  
Jefferson City, MO 65109**

**PHONE: 573-751-7482  
FAX: 573-526-1218**

**1.2 General Information:**

1.2.1 This document constitutes an invitation for competitive, sealed bids for the procurement of Calcium Chloride (Liquid) as set forth herein.

1.2.2 Organization - This document, referred to as a Request for Bid (RFB), is divided into the following parts:

- 1) Introduction and General Information
- 2) Scope of Work
- 3) Bid Submission
- 4) Pricing Page(s)
- 5) Signature Page(s)
- 6) Attachments
- 5) Terms and Conditions

## **2. SCOPE OF WORK**

### **2.1 General Requirements:**

- 2.1.1 The contractor shall provide Calcium Chloride (Liquid) on an as needed, if needed basis for the Missouri Highway and Transportation Commission (MHTC) and Missouri Department of Transportation (MoDOT), in accordance with the provisions and requirements stated herein.
- 2.1.2 The contractor shall provide all deliverables/services to the sole satisfaction of MoDOT.
- 2.1.3 MoDOT estimates, but does not guarantee, the purchase of the estimated quantities stated herein on Attachment A.
- 2.1.4 MoDOT reserves the right to obtain "like or similar" products as specified herein from other manufacturers, exclusive of the contract, when use of such products is deemed in the best interest of MoDOT.
- 2.1.5 The contractor shall insure that all materials, equipment, and/or services specified herein complies with MoDOT Specification # MGS-92-07G, Attachment B, and any other provisions outlined in this document.
- 2.1.6 Unless otherwise specified herein, the contractor shall furnish all material, labor, facilities, equipment, and supplies necessary to provide the deliverables/services required herein.

### **2.2 Delivery Requirements:**

- 2.2.1 The contractor shall deliver Calcium Chloride (Liquid) as specified herein to various locations as specified on Attachment C elsewhere herein.
- 2.2.2 The contractor shall deliver Calcium Chloride (Liquid) within fifteen (15) calendar days after the order is placed. In the event the fifteenth (15th) calendar day is a Saturday, Sunday or Holiday, the delivery shall be accomplished on the next normal workday.
- 2.2.3 The contractor shall unload Calcium Chloride (Liquid) into MoDOT storage tanks.
- 2.2.4 The contractor shall deliver Calcium Chloride (Liquid) during normal working hours (7:30 a.m. - 4:00 p.m. Monday through Friday) unless specified otherwise by the District Engineer or his authorized representative.
- 2.2.5 The contractor shall understand and agree that:
  - a) deliveries shall not be requested or accepted on Holidays, Saturdays or Sundays unless a mutual agreement has been reached between the contractor and MoDOT.
  - b) failure to deliver as requested could be justification for cancellation of the contract award.

### **2.3 Liquidated Damage Requirements:**

- 2.3.1 The contractor shall agree and understand that providing the Calcium Chloride (Liquid) in accordance with the requirements stated herein is considered critical to the efficient operations of MoDOT. However, since the amount of actual damages would be difficult to establish in the event the contractor fails to comply with the contractual requirements, the contractor shall agree and understand that the amount identified below as liquidated damages shall be reasonable and fair under the circumstances.
  - a. In the event the contractor fails to provide the Calcium Chloride (Liquid) in accordance with the contractual requirements specified herein, the contractor shall be assessed liquidated damages in the amount of \$250.00 per day for each such delinquent day.

- b. The contractor shall further agree and understand that such liquidated damages shall either be deducted from the total amount due the contractor or paid by the contractor as a direct payment to MoDOT, at the sole discretion of MoDOT.
- c. The contractor shall agree and understand that the liquidated damages described herein shall not be construed as a penalty.
- d. The contractor shall agree and understand that all assessments of liquidated damages shall be within the discretion of the State of Missouri and shall be in addition to, not in lieu of, the rights of the State of Missouri to pursue other appropriate remedies.
- e. The contractor shall agree and understand that all assessments of liquidated damages shall be within the discretion of each District as a separate entity, and shall be in addition to, not in lieu of, the rights of the State of Missouri to pursue other appropriate remedies. The contractor shall agree and understand that each District's decision shall be individual, final, and without recourse.

## **2.4 Invoicing and Payment Requirements:**

- 2.4.1 The contractor shall submit an itemized invoice to the applicable requesting address for the completion of deliverables, as specified herein.
- 2.4.2 Each invoice should be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.
- 2.4.3 The contractor shall be paid in accordance with the firm, fixed prices stated on the pricing page(s) of this document after completion of deliverables specified herein and acceptance by MoDOT.
- 2.4.4 Other than the payment specified above, no other payments or reimbursements shall be made to the contractor for any reason whatsoever.
- 2.4.5 MoDOT is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Federal Excise Tax Exemption Certificate will be furnished to the successful bidder upon request.
- 2.4.6 Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The Missouri Highways and Transportation Commission (MHTC) shall not make any advance deposits.
- 2.4.7 The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the contractor's expense.
- 2.4.8 The MHTC reserves the right to purchase goods and services using the state-purchasing card.

## **2.5 Other Contractual Requirements:**

- 2.5.1 Contract Period - The contract shall commence from the date of award until May 31, 2010 with up to two (2) one-year renewal option periods. If the option for renewal is exercised by MoDOT, the contractor shall agree to all terms and conditions of the RFB and all subsequent amendments. Renewal options are at the sole discretion of MoDOT.

- 2.5.2 Renewal Periods - If the option for renewal is exercised by MoDOT, the contractor shall agree that the prices for the renewal period shall not exceed the maximum price for the applicable renewal period stated herein.
- a. If renewal prices are not provided, the prices during renewal periods shall be the same as during the original contract period.
  - b. MoDOT does not automatically exercise its option for renewal based upon the maximum price and reserves the right to offer or to request renewal of the contract at a price less than the maximum price stated.
  - c. In the event MoDOT exercises its option(s) to renew the contract, the requirements for future years shall be basically similar.
- 2.5.3 Inspection Specifications - MoDOT reserves the right to inspect the material at the point of manufacture, intermediate storage point, or at a destination which shall be at the discretion of MoDOT.
- 2.5.4 Escalation Clause - In the event the contractor requests a price increase during the contract period, the contractor must provide a written request and documentation justifying the need for a price increase, and the amount of such price increase. MoDOT will review the contractor's written request and documentation, and decide if a price increase is to be granted at that particular time. The contractor shall understand and agree that MoDOT's decision shall be final and without recourse.
- a. No price increase shall be granted during the first 3 months of the original contract period.

### 3. BID SUBMISSION

#### 3.1 Bid Submission Information:

- 3.1.1 All bids must be received in a sealed envelope clearly marked "Calcium Chloride (Liquid)".
- 3.1.2 All bids must be received at the following address no later than June 3, 2009 at 2:00 p.m., CDT.

The Missouri Department of Transportation  
General Services – Procurement Division  
Attn: Brenda Tyree  
830 MoDOT Drive  
Jefferson City, MO 65109

- 3.1.3 The bidder may withdraw, modify or correct his bid after it has been deposited with the MoDOT provided such request is submitted in writing and received at the location designated for the bid opening prior to the time specified for opening bids. Such a request received as specified will be attached to the bid and the bid will be considered to have been modified accordingly. No bid may be modified after the time specified for the opening of bids.
- 3.1.4 Open Competition / Request For Bid Document:
- a. It shall be the bidder's responsibility to ask questions, request changes or clarification, or otherwise advise MoDOT if any language, specifications or requirements of an RFB appear to be ambiguous, contradictory, and/or arbitrary, or appear to inadvertently restrict or limit the requirements stated in the RFB to a single source. Any and all communication from bidders regarding specifications, requirements, competitive bid process, etc., must be directed to the buyer from MoDOT, unless the RFB specifically refers the bidder to another contact. Such communication should be received at least three (3) working days prior to the official bid opening date.
  - b. Every attempt shall be made to ensure that the bidder receives an adequate and prompt response. However, in order to maintain a fair and equitable bid process, all bidders will be advised, via the issuance of an amendment to the RFB, of any relevant or pertinent information related to the procurement. Therefore, bidders are advised that unless specified elsewhere in the RFB, any questions received less than three (3) working days prior to the RFB opening date may not be answered.
  - c. Bidders are cautioned that the only official position of the State of Missouri is that which is issued by MoDOT in the RFB or an amendment thereto. No other means of communication, whether oral or written, shall be construed as a formal or official response or statement.
  - d. MoDOT monitors all procurement activities to detect any possibility of deliberate restraint of competition, collusion among bidders, price-fixing by bidders, or any other anticompetitive conduct by bidders which appears to violate state and federal antitrust laws. Any suspected violation shall be referred to the Missouri Attorney General's Office for appropriate action.

- 3.1.5 Bids will be reviewed to determine if the bid complies with the mandatory requirements, and to determine the lowest and best bid.
- 3.1.6 Cost Determination – The low bid shall be determined by reviewing each bidder's firm, fixed prices for each district on the pricing page.
- 3.1.7 Contract Award – The contract will be awarded to the lowest responsive bidder determined as specified above.
- a. Award of this bid will be made on a "District-by-District" basis using the "lowest and best" principle of award.
- 3.1.8 The MHTC reserves the right to reject any or all bids and no award is final until formally approved by the MHTC.

- 3.1.9 **NOTE:** The bidder must be in compliance with the laws regarding conducting business in the State of Missouri. Within ten (10) business days of notification, the bidder will need to provide a copy of his/her Missouri Secretary of State's "Certificate of Good Standing" prior to the issuance of any contract or initial purchase order by MoDOT.



#### 4. PRICING PAGE

**4.1 CALCIUM CHLORIDE (LIQUID)** – The bidder shall provide a firm, fixed price in the table below for the original contract period and a maximum price for each potential renewal period for providing the deliverables/services in accordance with the provisions and requirements of this RFB. All costs associated with providing the required deliverables/services shall be included in the prices stated below.

<b>CALCIUM CHLORIDE (LIQUID)</b>				
<b>Item #</b>	<b>Commodity Code &amp; Description</b>	<b>Original Contract Period Firm, Fixed Price</b>	<b>1<sup>st</sup> Renewal Period Maximum Price</b>	<b>2<sup>nd</sup> Renewal Period Maximum Price</b>
001	7754577330 - Calcium Chloride (Liquid) – District 1	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
002	7754577330 - Calcium Chloride (Liquid) – District 2	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
003	7754577330 - Calcium Chloride (Liquid) – District 3	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
004	7754577330 - Calcium Chloride (Liquid) – District 4	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
005	7754577330 - Calcium Chloride (Liquid) – District 5	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
006	7754577330 - Calcium Chloride (Liquid) – District 6	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
007	7754577330 - Calcium Chloride (Liquid) – District 7	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
008	7754577330 - Calcium Chloride (Liquid) – District 8	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
009	7754577330 - Calcium Chloride (Liquid) – District 9	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon
010	7754577330 - Calcium Chloride (Liquid) – District 10	\$ _____ per gallon	\$ _____ per gallon	\$ _____ per gallon

**Minimum Load:** \_\_\_\_\_ gallons

**Brand Name** \_\_\_\_\_

\_\_\_\_\_  
*Signature*

\_\_\_\_\_  
*Date*

ANTI-COLLUSION STATEMENT

STATE OF \_\_\_\_\_ )  
 ) SS.  
COUNTY OF \_\_\_\_\_ )

\_\_\_\_\_ being first

duly sworn, deposes and says that he is \_\_\_\_\_  
Title of Person Signing

of \_\_\_\_\_

\_\_\_\_\_  
Name of Bidder

that all statements made and facts set out in the bid for the above project are true and correct; and that the bidder (The person, firm, association, or corporation making said bid) has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such bid or any contract which may result from its acceptance.

Affiant further certifies that bidder is not financially interested in, or financially affiliated with, any other bidder for the above project.

By \_\_\_\_\_

By \_\_\_\_\_

By \_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Notary Public

My Commission Expires \_\_\_\_\_

## PREFERENCE IN PURCHASING PRODUCTS

DATE: \_\_\_\_\_

The bidders attention is directed to Section 34.076 RSMo 2000 which gives preference to Missouri corporations, firms, and individuals when letting contracts or purchasing products.

Bids/Quotations received will be evaluated on the basis of this legislation.

**All vendors submitting a bid/quotation must furnish ALL information requested below.**

**FOR CORPORATIONS:**

State in which incorporated: \_\_\_\_\_

**FOR OTHERS:**

State of domicile: \_\_\_\_\_

**FOR ALL VENDORS:**

List address of Missouri offices or places of business:

---

---

---

---

---

---

---

---

**THIS SECTION MUST BE COMPLETED AND SIGNED:**

**FIRM NAME:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_

**CITY:** \_\_\_\_\_ **STATE:** \_\_\_\_\_ **ZIP:** \_\_\_\_\_

**BY (signature required):** \_\_\_\_\_

**Federal Tax I.D. #:** \_\_\_\_\_ **if no Federal Tax I.D. # - list Social Security #:** \_\_\_\_\_

NOTE: For bid/quotation to be considered, the "Preference in Purchasing Products" form must be on file in the General Services (Procurement) Division and must be dated in the current calendar year.

## MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT

The bidder's attention is directed to the Missouri Domestic Products Procurement Act, Sections 34.350 to 34.359, RsMO, which requires all manufactured goods or commodities used or supplied in the performance of this contract or any subcontract to be manufactured or produced in the United States.

Section 34.355, RsMO, requires the vendor or contractor to certify his compliance with Section 34.353 and, if applicable, Section 34.359, RsMO, at the time of bidding **and** prior to payment. Failure to comply with Section 34.353, RsMO, during the performance of the contract **and** to provide certification of compliance prior to payment will result in nonpayment for those goods or commodities.

Section 34.353.2, RsMO, specifies that it does not apply where the total contract is less than Twenty-Five Thousand Dollars (\$25,000.00). If your total bid is Twenty-Five Thousand Dollars (\$25,000.00) or more, you **must** complete this form as directed below.

**Failure to complete and return this document with this bid will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis. Please read the certification appearing below on this form.**

☐ If all the goods or products specified in the attached bid which the bidder proposes to supply to the State shall be manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left.

☐ If only one item of any particular goods or products specified in the attached bid is manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left and list the items (or item number) here:

☐ If any or all of the goods or products specified in the attached bid which the bidder proposes to supply to the State are **not** manufactured or produced in the "United States" as defined in Section 34.350, RsMO, then: (a) check the box at left; (b) list below, by item (or item number), the country other than the United States where each good or product is manufactured or produced; and (c) check the boxes to the left of the paragraphs below if applicable and list the corresponding items (or item numbers) in the spaces provided.

Item (or item number)	Location Where Item Manufactured or Produced

(attach an additional sheet if necessary)

☐ The following specified goods or products cannot be manufactured or produced in the United States in sufficient quantities or in time to meet the contract specifications. Items (or item numbers):

☐ The following specified goods or products must be treated as manufactured or produced in the United States, in accordance with an existing treaty, law, agreement, or regulation of the United States, including a treaty between the United States and any foreign country regarding export-import restrictions or international trade. Items (or item numbers):

### CERTIFICATION

By submitting this document, completed as directed above, with a bid, the bidder certifies under penalty of making false declaration (Section 575.060, RsMO) that the information contained in this document is true, correct and complete, and may be relied upon by the State in determining the bidders qualifications under and in compliance with the Missouri Domestic Products Procurement Act.

**The bidder's failure to complete and return this document with the bid as directed above will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis pursuant to Section 34.353.3(2), RsMO.**

### NOTICE

The Department is interested in assisting Missouri governmental entities, etc. in purchasing equipment, various materials, and supplies that meet the MoDOT specifications.

Each bidder is asked to indicate below whether they would be willing to offer **Calcium Chloride (Liquid)** listed in the attached "Request for Bid" for sale to these local political entities at the same bid price offered to this Department.

It is understood the Department will not issue purchase orders, accept delivery nor make payment for these items ordered by any of these agencies. It is further understood the price is based on the **Calcium Chloride (Liquid)** meeting the Department specifications. Any added options, deletions, or extra freight costs would be negotiated between the local agency and the successful vendor.

Indicate below whether your company is willing to offer such cooperative purchasing for Missouri counties, cities or other political entities.

YES \_\_\_\_\_

NO \_\_\_\_\_

If the price varies throughout the state on Department bids because of different delivery destinations, please indicate the price f.o.b. your location that would be offered as described.

F.O.B. Location \_\_\_\_\_

Indicate the deadline date that orders will be accepted. \_\_\_\_\_

COMPANY NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

PHONE NUMBER \_\_\_\_\_

SIGNATURE \_\_\_\_\_

TITLE \_\_\_\_\_

DATE \_\_\_\_\_

## MISSOURI SERVICE-DISABLED VETERAN BUSINESS PREFERENCE

By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable.

### Definitions:

**Service-Disabled Veteran** is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs.

**Service-Disabled Veteran Business** is defined as a business concern:

- a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and
- b. The management and daily business operations of which are controlled by one or more service-disabled veterans.

If a bidder meets the definitions of a service-disabled veteran and a service-disabled veteran business as defined in 34.074 RSMo and is either doing business as a Missouri firm, corporation, or individual; or maintains a Missouri office or place of business, the bidder **must** provide the following with the bid in order to receive the Missouri service-disabled veteran business preference over a non-Missouri service-disabled veteran business when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable:

- a. A copy of a letter from the Department of Veterans Affairs (VA), or a copy of the bidder's discharge paper (DD Form 214, Certificate of Release or Discharge from Active Duty) from the branch of service the bidder was in, stating that the bidder has a service-connected disability rating ranging from 0 to 100% disability; and
- b. A completed copy of this exhibit

(NOTE: For ease of evaluation, please attach copy of the above-referenced letter from the VA or a copy of the bidder's discharge paper to this Exhibit.)

By signing below, I certify that I meet the definitions of a service-disabled veteran and a service-disabled veteran business as defined in 34.074 RSMo and that I am either doing business as a Missouri firm, corporation, or individual; or maintain Missouri offices or places of business at the location(s) listed below.

### Veteran Information

### Business Information

Service-Disabled Veteran's Name, (Please Print)

Service-Disabled Veteran Business Name

*Service-Disabled Veteran's Signature*

Missouri Address of Service-Disabled Veteran  
Business

**Missouri Highways and Transportation Commission**  
**Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions**

**STANDARD SOLICITATION PROVISIONS**

- a. The Missouri Department of Transportation (MoDOT) reserves the right to reject any or all bids/quotes/proposals, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid/quote/proposal, unit prices will govern.
- b. All bids/quotes/proposals must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
- c. By virtue of statutory authority, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown, within the State of Missouri.
- d. Time of delivery is a part of the consideration and, if not otherwise stated in the solicitation documents, must be stated in definite terms by the Bidder/Officer and must be adhered to. If time varies on different items, the Bidder/Officer shall so state.
- e. If providing bids/quotes/proposals for commodities, the Bidder/Officer will state brand or make on each item. If bidding or proposing other than the make, model or brand specified, the manufacturer's name, model number or catalog number must be given.
- f. **For bids/proposals of \$25,000 or more**, no bids/proposals by telephone, telegram or telefax will be accepted.
- g. The date specified for the returning of bids/quotes/proposals is a firm deadline and all bids/quotes/proposals must be received at the designated office by that time. The Department does not recognize the U.S. Mail, Railway Express Agency, Air Express, or any other organization, as its agent for purposes of accepting proposals. All proposals arriving at the designated office after the deadline specified will be rejected.

**GENERAL TERMS AND CONDITIONS**

**General Performance**

- a. This work is to be performed under the general supervision and direction of the Missouri Department of Transportation (MoDOT) and, if awarded any portion of the work, the Contractor agrees to furnish at his own expense all labor and equipment required to complete the work, it being expressly understood that this solicitation is for completed work based upon the price(s) specified and is not a solicitation for rental of equipment or employment of labor by MoDOT, and MoDOT is to have no direction or control over the employees used by the Contractor in performance of the work.

**Deliveries**

- a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Material arriving after 3:00 p.m. will not be unloaded until the following workday. No material will be received on Saturday, Sunday or state holidays.
- b. If the prices bid herein include the delivery cost of the material, the Contractor agrees to pay all transportation charges on the material as FOB - Destination. Freight costs must be included in the unit price bid and not listed as a separate line item.
- c. Any demurrage is to be paid by the Contractor direct to the railroad or carrier.

**Nondiscrimination**

- a. The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- b. All solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of the Contractor's obligations under this contract and the Regulations, will be relative to nondiscrimination on the grounds of race, color, or national origin.
  - 1) **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MoDOT shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
    - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
    - ii. cancellation, termination or suspension of the contract, in whole or in part.

**Contract/Purchase Order**

- a. By submitting a bid/quote/proposal, the Bidder/Officer agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's proposal and/or submitted pricing, and (3) the MHTC's acceptance of the proposal and/or bid by purchase order or post-award contract.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized purchase order and/or notice to proceed.
- d. The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Contractor and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification.

**Subcontracting**

- a. It is specifically understood that no portion of the material or any interest in the contract, shall be subcontracted, transferred, assigned or otherwise disposed of, except with the written consent of MoDOT. Request for permission to subcontract or otherwise dispose of any part of the work shall be in writing to MoDOT and accompanied by documentation showing that the organization which will perform the work is particularly experienced and

**Missouri Highways and Transportation Commission**  
**Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions**

equipped for such work.

- b. Consent to subcontract or otherwise dispose of any portion of the work shall not be construed to relieve the Contractor of any responsibility for the production and delivery of the contracted work and the completion of the work within the specified time.
- c. All payments for work performed by a subcontractor shall be made to the Contractor to whom the contract was awarded and the purchase order issued.

**Applicable Laws and Regulations**

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MoDOT a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
  - 1) Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MoDOT a copy of their current Transient Employer Certificate from the Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
- c. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.

**Executive Order**

- a. The Contractor shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6<sup>th</sup>) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement.
  - 1) "By signing this Agreement, the Contractor hereby certifies that any employee of the Contractor assigned to perform services under the contract is eligible and authorized to work in the United States in compliance with federal law."
  - 2) In the event the Contractor fails to comply with the provisions of the Executive Order 07-13, or in the event the Commission has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Commission reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.
  - 3) The Contractor shall include the provisions of this paragraph in every subcontract. The Contractor shall take such action with respect to any subcontract as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance.

**Preferences**

- a. In the evaluation of bids/quotes/proposals, preferences shall be applied in accordance with Chapter 34 RSMo. Contractors should apply the same preferences in selecting subcontractors.
- b. By virtue of statutory authority, RSMo. 34.076 and 34.350 to 34.359, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown within the State of Missouri. Such preference shall be given when quality is equal or better and delivered price is the same or less.
  - 1) If attached, the document entitled **"PREFERENCE IN PURCHASING PRODUCTS"** should be completed and returned with the solicitation documents.
  - 2) If attached, the document entitled **"MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT"** should be completed and returned with the solicitation documents. **Applies if bid is Twenty-Five Thousand Dollars (\$25,000.00) or more.**
- c. By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable.
  - 1) If attached, the document entitled **"MISSOURI SERVICE-DISABLED VETERAN PREFERENCE"** should be completed and returned with the solicitation documents.
- d. In the event of a tie of low bids, the MHTC reserves the right to establish the method to be used in determining the award

**Remedies and Rights**

- a. No provision in the contract shall be construed, expressly or implied, as a waiver by the MHTC of any existing or future right and/or remedy available by law in the event of any claim by the MHTC of the Contractor's default or breach of contract.
- b. The Contractor agrees and understands that the contract shall constitute an assignment by the Contractor to the MHTC of all rights, title and interest in and to all causes of action that the Contractor may have under the antitrust laws of the United States or State of Missouri for which causes of action



**Missouri Highways and Transportation Commission**  
**Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions**

have accrued or will accrue as the result of or in relation to the particular equipment, supplies, and/or services purchased or produced by the Contractor in the fulfillment of the contract with the MHTC.

- c. In the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request MoDOT to enter into such litigation to protect the interests of the MHTC, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**Cancellation of Contract**

- a. The MHTC may cancel the contract at any time for a material breach of contractual obligations or for convenience by providing the Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.
- b. If the MHTC cancels the contract for breach, the MHTC reserves the right to obtain the equipment, supplies, and/or services to be provided pursuant to the contract from other sources and upon such terms and in such manner as the MHTC deems appropriate and charge the Contractor for any additional costs incurred thereby.

**Bankruptcy or Insolvency**

- a. Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assigned the benefit or creditors, the Contractor must notify MoDOT immediately. Upon learning of any such actions, the MHTC reserves the right, at its sole discretion, to either cancel the contract or affirm the contract and hold the Contractor responsible for damages.

**Inventions, Patents, and Copyrights**

- a. The Contractor shall defend, protect, and hold harmless the MHTC, its officers, agents, and employees against all suits of law or in equity resulting from patent and copyright infringement concerning the Contractor's performance or products produced under the terms of the contract.

**Inspection and Acceptance**

- a. No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
- b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Contractor upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
- c. The MHTC reserves the right to return any such rejected shipment at the Contractor's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
- d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

**Warranty**

- a. The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by MoDOT, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.
- b. Such warranty shall survive delivery and shall not be deemed waived either by reason of the MHTC's acceptance of or payment for said equipment, supplies, and/or services.

**Status of Independent Contractor**

- a. The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

**Indemnification**

- a. The Offeror shall defend, indemnify and hold harmless the Commission, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Offeror's performance of its obligations under this Agreement.

**SPECIAL TERMS AND CONDITIONS**

**Insurance**

- (1) Prior to contract signing, the Offeror may be asked about its ability to provide certificates of insurance which meet, or approach, the following coverages:

a. General Liability

Not less than \$500,000 for any one person in a single accident or occurrence, and  
not less than \$3,000,000 for all claims arising out of a single occurrence;

**Missouri Highways and Transportation Commission**  
**Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions**

- b. Automobile Liability Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence;
- c. Missouri State Workmen's Compensation policy or equivalent in accordance with state law.

### Required Specifications

- a. The material to be supplied under the contract will comply with the quality and gradation requirements of the **Missouri Standard Specifications for Highway Construction, Edition of 2004**, and any revisions thereto, unless modified by these specifications.

## Information and Reports

- a. The Contractor shall provide all information and reports required by the Regulations, or Directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Missouri Department of Transportation or the Federal Highway Administration to be pertinent to ascertain compliance with such Regulations or Directives. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the Missouri Department of Transportation, or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

### Permits, Licenses and Safety Issues

- a. The contract price shall include any necessary permits and licenses required by law incidental to the work. Local ordinances requiring building permits are not applicable to state agencies.
- b. The Contractor will comply with local laws involving safety in the prosecution of the work.

### Notice to Proceed

- a. Within **30 days** after the execution of the contract, a **"Notice to Proceed"** will be issued by the Department. A purchase order will be attached to the "Notice to Proceed," which will specify the date or dates that the Contractor can start delivery, roadway or stockpile delivery and will also include the completion dates. These dates will be in accordance with the dates shown in the proposal.

### Delivery – Additional Requirements

- a. The Contractor shall furnish the Missouri Department of Transportation with a planned delivery schedule at least 16 hours before starting delivery.
  - 1) Notification should be during the normal workday preceding the day on which the Contractor desires to initiate delivery.
  - 2) It will be necessary for a representative of the Missouri Department of Transportation to be present when the material is delivered.
- b. The following days shall be construed as **official holidays** under the terms of the contract:

January 1	New Year's Day
Third Monday in January	Martin Luther King, Jr.'s Birthday
February 12	Lincoln's Birthday
Third Monday in February	Washington's Birthday
May 8	Truman's Birthday
Last Monday in May	Memorial Day
July 4	Independence Day
First Monday in September	Labor Day
Second Monday in October	Columbus Day
November 11	Veteran's Day
Fourth Thursday in November	Thanksgiving Day
December 25	Christmas Day

- c. When any of the above **holidays** falls on a **Sunday**, the holiday will be observed on the following **Monday**; when any of the above **holidays** falls on a **Saturday**, the **holiday** will be observed on the immediately preceding **Friday**.

### Legal Weights

- a. Provisions of the Missouri Statutes relative to legal weights in regard to axle and gross weights, gross weights in relation to axle spacing and Supplementary Bridge limits all contained in **Sections 304.180 and 304.190 RSMo** are understood and will be abided by. The Department will not accept loads, which exceed legal weights.
- b. It is understood and agreed that the Missouri Department of Transportation may prohibit the use of large trucks hauling heavy loads of material over low type bituminous roads and during adverse weather conditions.

### Increase or Decrease Quantities

- a. The Highways and Transportation Commission reserves the right to increase or decrease the quantity of material twenty-five percent (25%), subject to the maximum quantity specified by the bidder in his bid.
- b. The quantity finally ordered by the Commission will be furnished by the bidder at the same unit price.

**Missouri Highways and Transportation Commission**  
**Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions**

**Basis of Measurement for Payment**

- a. For truck delivery, the quantities for basis of payment are to be determined as provided in **Section 310.4 of the Missouri Standard Specifications for Highway Construction, Edition of 2004**, and any revisions thereto.

**Temporary Suspension of Work**

- a. The **District Engineer** shall have authority to suspend work wholly or in part for such period or periods as may be deemed necessary when weather or other conditions are such that in the opinion of the engineer, the work may be done at a later time with advantage to the Department or for failure on the part of the Contractor to comply with any of the provisions of the Contract.
- b. If the Department suspends the work for its own advantages and not because of the Contractor's failure to comply with the Contract, the Contractor will be allowed an equal number of calendar days after the completion date for the completion of the work. The Department may at its discretion give the Contractor an extension of time for completing the work where the Contractor incurs delays for causes beyond his control.
- c. Normal rainfall is not considered a cause qualifying for an extension of time. Claim for extension of time for all causes must be submitted by the Contractor in writing within **30 Days** after the claimed cause for the delay has ceased to exist.

**Cancellation of Contract**

- a. If the Contractor/supplier fails to carry out the performance of the work with sufficient workmen and equipment to insure the completion of the delivery within the time specified or becomes insolvent or is adjudicated a bankrupt or commits any act of bankruptcy or insolvency or allows any final judgment to stand against him for a period of ten (10) days, the Missouri Department of Transportation may give notice in writing by registered mail to the Contractor/supplier and the surety of such delay, neglect or default.
- b. If, within ten (10) days after such notice the Contractor/supplier does not proceed to remedy to the satisfaction of the Department's representatives the faults specified in said notice, or the surety does not proceed to take over the deliveries, the Department shall have full power and authority, without impairing the obligation of the Contractor/supplier under the contract or the surety under the bond, to take over the completion of the work and arrange for the shipment of any materials necessary to complete the work and the Contractor/supplier and the surety will be responsible for any additional costs incurred by the Department in obtaining the completion of the deliveries.

**Environmental Issues**

Attention of the bidder is invited to the **Land Reclamation Act, Chapter 444, Laws of 1971, (House Bill 519)** and the necessity for compliance if applicable.

The Contractor shall take necessary precautions and shall schedule and conduct his operations so as to avoid or minimize siltation of streams while removing gravel there from.

District										Total			Calcium Chloride
1	2	3	4	5	6	7	8	9	10	Quantity	Unit		
		</											



## LIQUID CALCIUM CHLORIDE MGS-92-07G

**1.0 DESCRIPTION.** This specification covers Liquid Calcium Chloride for use as a de-icer for maintenance purposes.

## **2.0 MATERIALS.**

**2.1 Liquid Calcium Chloride.** The percent liquid calcium chloride ( $\text{CaCl}_2$ ) shall be  $32 \pm 1$  percent when tested in accordance with MoDOT Test Method T48 included in Annex A of this specification.

## **3.0 PACKAGING.**

**3.1** The supplier shall furnish the truck driver a copy of the bill of lading, manifest, or truck ticket to be delivered to MoDOT personnel prior to unloading, showing the following information regarding the shipment:

- (a) Type of Material.
- (b) Purchase Order Number.
- (c) Consignee.
- (d) Truck Number.
- (e) Weights of truck before and after loading and net weight.
- (f) Specific Gravity of the product
- (g) Destination.
- (h) Date Loaded.
- (i) Name and location of the source.
- (j) The percent  $\text{CaCl}_2$  for Liquid Calcium Chloride, typical of the material delivered.
- (k) A Certification Statement.
- (l) Weight per gallon of product

**3.1.1** The certification statement shall be signed by an authorized representative of the Supplier and substantially as follows:

"This certifies that the Liquid Calcium Chloride in this shipment complies with MoDOT specifications and the weights shown hereon were obtained on scales approved by and/or certified by the State of Missouri and are correct within the specified scale requirements."

**3.1.2** The requirements for platform scales for weighing liquid calcium chloride are shown in Annex B of this specification.

## **4.0 ACCEPTANCE.**

**4.1** Acceptance of the material will be on the basis of the manufacturer's certification and satisfactory compliance with this specification as determined by inspection and samples deemed necessary by the engineer at the point of manufacture, intermediate storage, from the truck at delivery, or from the MoDOT receiving tank if it was empty before delivery.



**4.2** If a sample fails to comply with the material requirements herein specified, all deliveries shall cease until such time as the engineer determines that adequate quality control has been re-established.

**4.3** If tests performed by the engineer show the material is not in compliance with the proper chemical composition, the engineer may opt to accept the material based on the agreed price being adjusted as follows:

$$\text{Adjusted Unit Price} = \frac{AP \times UP}{SP}$$

Where:

AP = Actual percent Calcium Chloride as determined by Engineer's Test Results (%)  
UP = Unit Price  
SP = Specified minimum percent Calcium Chloride as shown herein.



## ANNEX A

### Test Method MoDOT T48

### DETERMINATION OF THE PURITY OF CALCIUM CHLORIDE

#### 1.0 SCOPE.

1.1 This method describes a procedure for determining the purity of Calcium Chloride intended for use in snow and ice removal.

#### 2.0 REAGENTS AND APPARATUS.

2.1 Reagents and Apparatus as described in MoDOT Test Method T26.

#### 3.0 PROCEDURE.

3.1 Weigh, to the nearest 0.1 mg, a sample of the material sufficient to contain 1.45 to 1.55 grams of anhydrous  $\text{CaCl}_2$ . Transfer to a 1000 ml volumetric flask and add 200 ml  $\text{H}_2\text{O}$ . Add a few drops of HCl, Specific Gravity 1.19, to clear the solution. Add by pipette, 25 ml of the  $\text{MgCl}_2$  solution. Make just alkaline to Methyl Red with  $\text{NH}_4\text{OH}$ , and dilute to volume. Determine the calcium by titrating a 20 ml aliquot, using the method described in MoDOT Test Method T26.

#### 4.0 CALCULATIONS.

4.1 Calculate the percent Calcium Chloride as follows:

$$\% \text{CaCl}_2 = \frac{\text{ml of titration} \times F_{\text{Ca}} \times 50 \times 0.0495}{\text{Wt. of Sample}}$$

Report as:

% Calcium Chloride ( $\text{CaCl}_2$ ) to the nearest 0.1 percent

**ANNEX A (continued)**

**Test Method  
MoDOT T26  
DETERMINATION OF CALCIUM CARBONATE  
AND MAGNESIUM CARBONATE  
IN LIME AND PIGMENT MATERIALS**

**1.0 SCOPE.**

**1.1** This method describes a procedure for determining the percent Calcium Carbonate and percent Magnesium Carbonate in Agricultural Lime and Calcium Carbonate paint pigments.

**2.0 REAGENTS AND APPARATUS.**

- 2.1**
- (a) Sargent - Malmstadt Automatic Spectro-Electro titrator, Model S-29700
  - (b) Hexaver Solution  
Dissolve 65 gm Hexaver (Disodium Dihydrogen 1,2 Cyclohexanediaminetetracetate) in 2.0 liters of H<sub>2</sub>O
  - (c) Magnesium Chloride Solution  
Dissolve 8.00 gm MgCl<sub>2</sub>·6H<sub>2</sub>O (Reagent Grade) in H<sub>2</sub>O and dilute to 1 liter
  - (d) Calcon Indicator  
Dissolve 0.30 gm Calcon in 50 ml of Methanol
  - (e) EBT Indicator  
Dissolve 0.30 gm of Erichrome Black T in 50 ml of Methanol
  - (f) Potassium Hydroxide Solution  
Dissolve 100 gm KOH (Reagent Grade) in 200 ml H<sub>2</sub>O

**3.0 STANDARDIZATION OF HEXAVER SOLUTION.**

- 3.1**
- (a) Weigh 0.5801 gm Calcium Carbonate (Primary Standard Grade) and transfer to a 500 ml volumetric flask. Slowly add 15 ml HCL (Sp.Gr. 1.19), and boil for a few minutes to expel CO<sub>2</sub>. Add 2 gm NH<sub>4</sub>CL (Reagent Grade) and 200 ml H<sub>2</sub>O. Add with a pipette 10.00 ml of the MgCl<sub>2</sub> solution, and make alkaline to methyl red with NH<sub>4</sub>OH (Sp.Gr. 0.90). Cool to room temperature and dilute to volume.
  - (b) Turn on the power switch of the automatic titrator and allow to warm up for about 15 minutes. Set the controls as follows:

Function Switch - Spectro  
Polarity Switch - No. 2  
Wavelength Selector - 650  
The Hupp Cadmium Sulfide photocell should be used.

Pipette 25.00 ml aliquots into two 100 ml tall form beakers. To one beaker add 3 ml KOH Solution, 10 ml H<sub>2</sub>O, and 10 drops of Calcon indicator. Place the beaker on the titration platform and start the titrator. The burette should be adjusted so that the rate of delivery is about 45 seconds between the 35 ml mark and the 45





ml mark. When the titrator shuts off, record the burette reading as  $T_{ca}$ . To the second beaker, add 10 ml  $NH_4OH$  and 8 drops of EBT Indicator. Titrate as described above, and record the burette reading as  $T_{mg}$ .

Calculate the Calcium and Magnesium equivalents of the Hexaver as follows:

$$\text{CaO Equiv. (F}_{ca}) = \frac{65}{T_{ca}}$$

$$\text{MgO Equiv. (F}_{mg}) = \frac{F_{ca}}{1.391}$$

$$K = T_{mg} - T_{ca}$$

#### 4.0 PROCEDURE.

4.1 Weigh 0.5000 gm sample of the material and transfer to a 250 ml beaker. Moisten with  $H_2O$  and add 10 ml HCL. Remove the insoluble matter,  $SiO_2$ , and  $R_2O_3$  by the methods set forth in ASTM C25. Collect all the filtrates and washings from the  $R_2O_3$  filtration in a 500 ml volumetric flask. Pipette 10 ml  $MgCl_2$  solution into the flask, cool and dilute to volume.

Titrate 25 ml aliquots for calcium and magnesium as described above in Section 3. Record the burette readings as  $T_{ca}$  and  $T_{mg}$ .

#### 5.0 CALCULATIONS.

5.1 Calculate the percent Calcium Carbonate and percent Magnesium Carbonate as follows:

$$\% \text{CaCO}_3 = F_{ca} \times T_{ca} \times 1.7848$$

$$\% \text{MgCO}_3 = F_{mg} \times (T_{mg} - T_{ca} - K) \times 2.0915$$

Report the results, to the nearest 0.1 percent, as follows:

% Calcium Carbonate ( $\text{CaCO}_3$ )

% Magnesium Carbonate ( $\text{MgCO}_3$ )

## ANNEX B

### SPECIFICATIONS FOR PLATFORM SCALES

**1.0** Equipment for weighing material shall consist of accurate and reliable platform scales approved by MoDOT.

**2.0** Calibration shall be to within an accuracy of 0.4 percent of the load applied, regardless of the location of the load on the platform. The value of the smallest unit of graduation on a scale shall be not greater than 20 pounds [10 kg]. Sensitivity requirements of scales not equipped with balance indicators shall be twice the value of the minimum graduated interval on the weigh beam, or 0.2 percent of the nominal capacity of the scale, whichever is less. For scales equipped with balance indicators, the sensitivity requirement shall be the value of the minimum graduated interval on the weigh beam.

**3.0** When equipment to be weighed is of such length that all axles cannot be weighed simultaneously, a level area of portland cement concrete or asphaltic concrete pavement shall be provided permitting those axles not on the scale platform to be on the pavement during the weighing operation. The approach shall be the same width as the platform and of sufficient length to insure the level positioning of vehicles during weight determinations. The weighing shall be performed with all brakes released. When equipment to be weighed is equipped with an air bag suspension unit on any axle, the equipment including semi-trailers or pup trailers shall be weighed on platform scales of sufficient size to weigh all axles of the combination simultaneously.

**4.0** Scales shall have been calibrated within the six month period immediately prior to any material being delivered or any time the MoDOT representative has cause to question the accuracy of the scale. A scale acceptance shall be based on one of the following:

- (a) A valid certification or seal of approval by the Division of Weights and Measures of the Missouri Department of Agricultural will be acceptable.
- (b) A valid certification or seal of approval by a State of Missouri duly appointed "sealer of weights and measures" in cities or counties of seventy-five thousand population or more will be acceptable.
- (c) Certification of calibration from a commercial scale service company showing that the scale meets the requirements of these specifications. The Supplier shall furnish the certification of calibration to the MoDOT representative.

**4.1** Regardless of the form of acceptance, the calibration shall be within the accuracy requirements specified herein and the scales shall meet all requirements of these specifications.

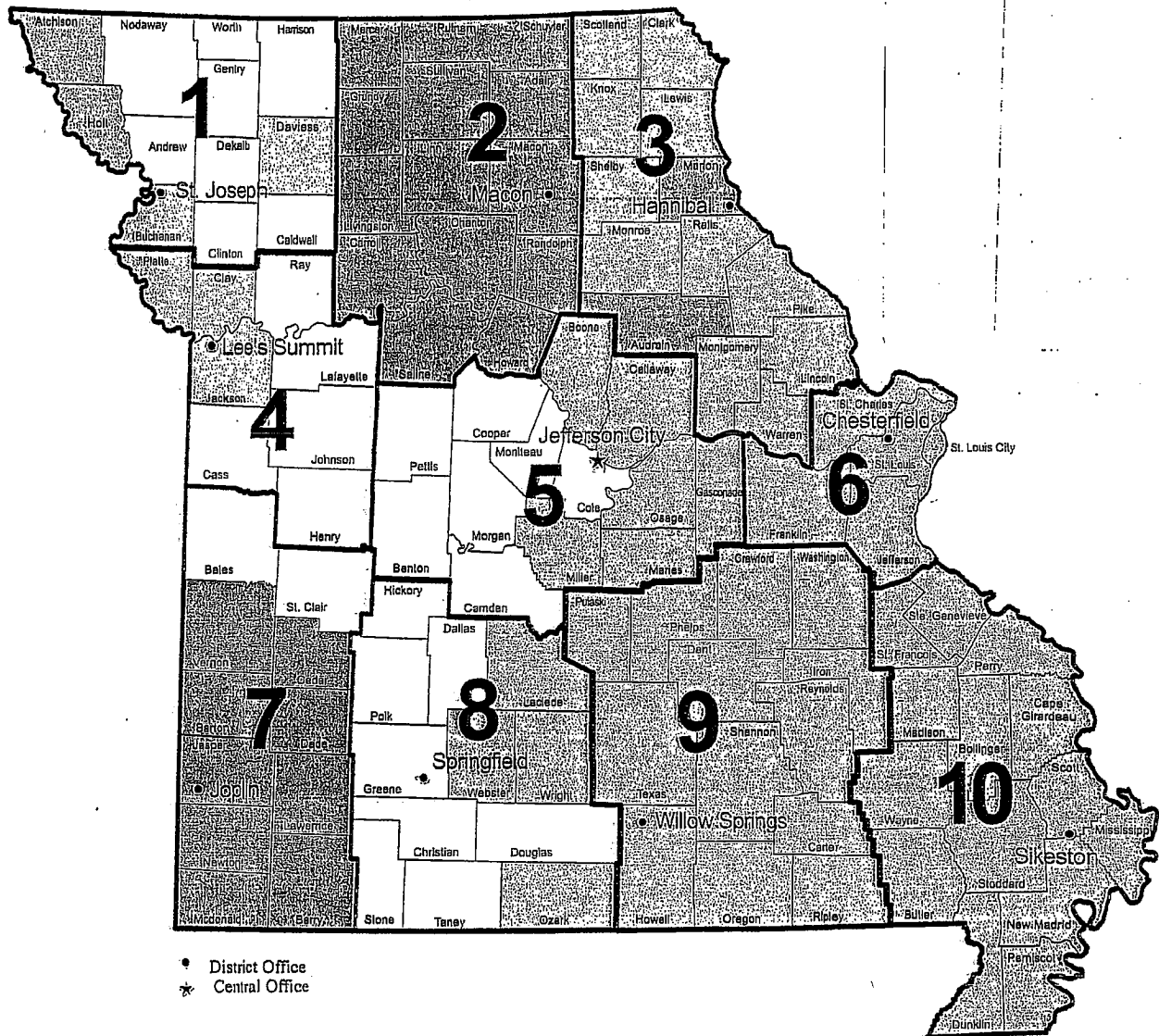
**4.2** Verification of a platform scale may be required of a hauling unit on another recently calibrated and certified scale.

**4.3** All Cost incurred in obtaining a certification of calibration or verification shall be borne by the Supplier.



# Missouri Department of Transportation

## District Outline Map



COUNTY	DIST.	COUNTY	DIST.	COUNTY	DIST.	COUNTY	DIST.	COUNTY	DIST.	COUNTY	DIST.
Adair.....	2	Cedar.....	7	Greene.....	8	Linn.....	2	Ozark.....	8	St. Louis.....	6
Andrew.....	1	Chariton.....	2	Grundy.....	2	Livingston.....	2	Pemiscot.....	10	Saline.....	2
Atchison.....	1	Christian.....	8	Harrison.....	1	McDonald.....	7	Perry.....	10	Schuyler.....	2
Audrain.....	3	Clark.....	3	Henry.....	4	Macon.....	2	Pettis.....	5	Scotland.....	3
Barry.....	7	Clay.....	4	Hickory.....	8	Madison.....	10	Phelps.....	9	Scott.....	10
Barton.....	7	Clinton.....	1	Holt.....	1	Maries.....	5	Pike.....	3	Shannon.....	9
Bates.....	7	Cole.....	5	Howard.....	2	Marion.....	3	Platte.....	4	Shelby.....	3
Benton.....	5	Cooper.....	5	Howell.....	9	Mercer.....	2	Polk.....	8	Stoddard.....	10
Bollinger.....	10	Crawford.....	9	Iron.....	9	Miller.....	5	Pulaski.....	9	Stone.....	8
Boone.....	5	Dade.....	7	Jackson.....	4	Mississippi.....	10	Putnam.....	2	Sullivan.....	2
Buchanan.....	1	Dallas.....	8	Jasper.....	7	Moniteau.....	5	Rails.....	3	Taney.....	8
Butler.....	10	Davies.....	1	Jefferson.....	6	Monroe.....	3	Randolph.....	2	Texas.....	9
Caldwell.....	1	Dekalb.....	1	Johnson.....	4	Montgomery.....	3	Ray.....	4	Vernon.....	7
Callaway.....	5	Dent.....	9	Knox.....	3	Morgan.....	5	Reynolds.....	9	Warren.....	3
Camden.....	5	Douglas.....	8	Laclede.....	8	New Madrid.....	10	Ripley.....	9	Washington.....	9
Cape Girardeau.....	10	Dunklin.....	10	Lafayette.....	7	Newton.....	7	St. Charles.....	6	Wayne.....	10
Carroll.....	2	Franklin.....	6	Lawrence.....	7	Nodaway.....	1	St. Clair.....	7	Webster.....	8
Carter.....	9	Gasconade.....	5	Lewis.....	3	Oregon.....	9	St. Francois.....	10	Worth.....	1
Cass.....	4	Gentry.....	1	Lincoln.....	3	Osage.....	5	Ste. Genevieve.....	10	Wright.....	8